

PATENT COOPERATION TREATY
PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference J.24521 WO	FOR FURTHER ACTION	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. PCT/GB 96/ 02856	International filing date (<i>day/month/year</i>) 19/11/1996	(Earliest) Priority Date (<i>day/month/year</i>) 22/12/1995
Applicant BRITISH SKY BROADCASTING LIMITED et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Certain claims were found unsearchable (see Box I).
2. Unity of invention is lacking (see Box II).
3. The international application contains disclosure of a nucleotide and/or amino acid sequence listing and the international search was carried out on the basis of the sequence listing
 - filed with the international application.
 - furnished by the applicant separately from the international application,
 - but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.
 - Transcribed by this Authority
4. With regard to the title,
 - the text is approved as submitted by the applicant.
 - the text has been established by this Authority to read as follows:
5. With regard to the abstract,
 - the text is approved as submitted by the applicant.
 - the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this International Search Report, submit comments to this Authority.
6. The figure of the drawings to be published with the abstract is:

Figure No. 4

 - as suggested by the applicant.
 - because the applicant failed to suggest a figure.
 - because this figure better characterizes the invention.

None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 96/02856

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 H04N7/173

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 95 01058 A (APPLE COMPUTER) 5 January 1995	1-8, 14-22, 28-40, 46-64 23-27
A	see page 5, line 1 - page 9, line 7 see page 25, line 1 - page 48, line 23 see page 53, line 1 - page 65, line 13 see page 68, line 1 - page 75, line 10 see figures 1-50 ---	
X	WO 94 14284 A (DISCOVERY COMMUNICATIONS INC) 23 June 1994 see page 18, line 14 - page 79, line 14 see figures 3-14 ---	1-19, 23-39, 61-64 -/-

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

1

Date of the actual completion of the international search

12 March 1997

Date of mailing of the international search report

27.03.97

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+ 31-70) 340-2040, Tx. 31 651 epo nl,
 Fax (+ 31-70) 340-3016

Authorized officer

Van der Zaal, R

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 96/02856

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 562 295 A (THOMSON CONSUMER ELECTRONICS) 29 September 1993 see page 2, line 53 - page 3, line 19 see figure 1 ---	23-27
A	CABLE TV SESSIONS, MONTREUX, JUNE 10 - 15, 1993, no. SYMP. 18, 11 June 1993, POSTES;TELEPHONES ET TELEGRAPHES SUISSES, pages 555-567, XP000379380 HOARTY W L: "MULTIMEDIA ON CABLE TELEVISION SYSTEMS" -----	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 96/02856

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9501058 A	05-01-95	US 5594509 A	14-01-97
		AU 7114394 A	17-01-95
-----	-----	-----	-----
WO 9414284 A	23-06-94	AU 5732994 A	04-07-94
		AU 5733094 A	04-07-94
		AU 5733194 A	04-07-94
		AU 5733294 A	04-07-94
		AU 5736394 A	04-07-94
		AU 5845894 A	22-06-94
		AU 5869894 A	04-07-94
		CA 2151458 A	23-06-94
		CN 1093211 A	05-10-94
		CN 1090451 A	03-08-94
		CN 1090452 A	03-08-94
		CN 1096151 A	07-12-94
		CN 1090453 A	03-08-94
		CN 1090454 A	03-08-94
		EP 0673578 A	27-09-95
		EP 0673579 A	27-09-95
		EP 0673580 A	27-09-95
		EP 0673581 A	27-09-95
		EP 0673582 A	27-09-95
		EP 0673583 A	27-09-95
		EP 0674824 A	04-10-95
		JP 8510869 T	12-11-96
		JP 8506938 T	23-07-96
		JP 8506939 T	23-07-96
		JP 8506940 T	23-07-96
		JP 8506941 T	23-07-96
		JP 8506942 T	23-07-96
		NZ 259148 A	26-11-96
		WO 9413107 A	09-06-94
		WO 9414279 A	23-06-94
		WO 9414280 A	23-06-94
		WO 9414281 A	23-06-94
		WO 9414282 A	23-06-94
		WO 9414283 A	23-06-94
		US 5559549 A	24-09-96
		US 5600364 A	04-02-97
		US 5600573 A	04-02-97

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

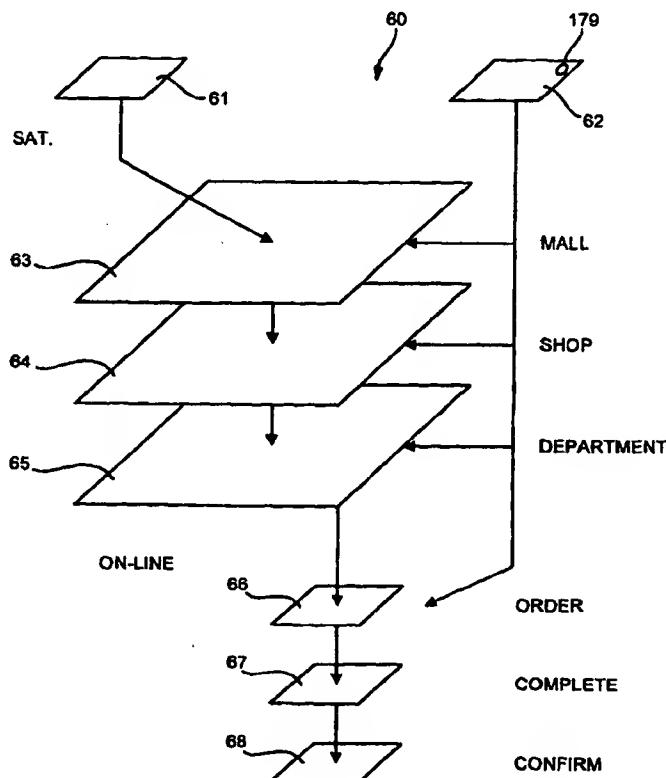
PCT/GB 96/02856

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0562295 A	29-09-93	BR 9300727 A	08-09-93



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : H04N 7/173		A1	(11) International Publication Number: WO 97/23997
			(43) International Publication Date: 3 July 1997 (03.07.97)
<p>(21) International Application Number: PCT/GB96/02856</p> <p>(22) International Filing Date: 19 November 1996 (19.11.96)</p> <p>(30) Priority Data: 9526304.2 22 December 1995 (22.12.95) GB 9616406.6 5 August 1996 (05.08.96) GB</p> <p>(71) Applicant (for all designated States except US): BRITISH SKY BROADCASTING LIMITED [GB/GB]; Grant Way, Isleworth, Middlesex TW7 5QD (GB).</p> <p>(72) Inventors; and</p> <p>(75) Inventors/Applicants (for US only): TOWNSEND, Christopher, Peter [GB/GB]; British Sky Broadcasting Limited, Grant Way, Isleworth, Middlesex TW7 5QD (GB). HOLLIDAY, David [GB/GB]; British Sky Broadcasting Limited, Grant Way, Isleworth, Middlesex TW7 5QD (GB). CROSSLEY, Robin [GB/GB]; British Sky Broadcasting Limited, Grant Way, Isleworth, Middlesex TW7 5QD (GB). WEBBER, Alun, David [GB/GB]; British Sky Broadcasting Limited, Grant Way, Isleworth, Middlesex TW7 5QD (GB). JAMES, Nicholas [GB/GB]; British Sky Broadcasting Limited, Grant Way, Isleworth, Middlesex TW7 5QD (GB).</p>			<p>(74) Agents: WHITTEN, George, Alan et al.; R.G.C. Jenkins & Co., 26 Caxton Street, London SW1H 0RJ (GB).</p> <p>(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p>Published With international search report.</p>
<p>(54) Title: IMPROVEMENTS IN RECEIVERS FOR TELEVISION SIGNALS</p> <p>(57) Abstract</p> <p>A receiver for television signals is arranged to receive video signals comprising video data and information data. The receiver is arranged to respond to viewer operation of a control device (28). The receiver includes a processor (23) for processing selected information data to convert the same into signals representative thereof for output to a television in combination with the video signals. The receiver is arranged to respond to the information data to output for display data derived from said image data and said information data and representing an interactive image. The receiver is responsive to viewer manipulation of the control device to vary the interactive image and to establish a telecommunications link to a remote site for on-line interaction via the interactive image between the viewer and the remote site. The interactive image may form part of an interactive services interface comprising a broadcast entry level and plural broadcast interactive levels. The interactive services interface may comprise one or more on-line interactive levels entered from one of the broadcast interactive levels for establishing an on-line connection with a remote site.</p>			



FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AM	Armenia	GB	United Kingdom	MW	Malawi
AT	Austria	GE	Georgia	MX	Mexico
AU	Australia	GN	Guinea	NE	Niger
BB	Barbados	GR	Greece	NL	Netherlands
BE	Belgium	HU	Hungary	NO	Norway
BF	Burkina Faso	IE	Ireland	NZ	New Zealand
BG	Bulgaria	IT	Italy	PL	Poland
BJ	Benin	JP	Japan	PT	Portugal
BR	Brazil	KE	Kenya	RO	Romania
BY	Belarus	KG	Kyrgyzstan	RU	Russian Federation
CA	Canada	KP	Democratic People's Republic of Korea	SD	Sudan
CF	Central African Republic	KR	Republic of Korea	SE	Sweden
CG	Congo	KZ	Kazakhstan	SG	Singapore
CH	Switzerland	LI	Liechtenstein	SI	Slovenia
CI	Côte d'Ivoire	LK	Sri Lanka	SK	Slovakia
CM	Cameroon	LR	Liberia	SN	Senegal
CN	China	LT	Lithuania	SZ	Swaziland
CS	Czechoslovakia	LU	Luxembourg	TD	Chad
CZ	Czech Republic	LV	Latvia	TG	Togo
DE	Germany	MC	Monaco	TJ	Tajikistan
DK	Denmark	MD	Republic of Moldova	TT	Trinidad and Tobago
EE	Estonia	MG	Madagascar	UA	Ukraine
ES	Spain	ML	Mali	UG	Uganda
FI	Finland	MN	Mongolia	US	United States of America
FR	France	MР	Mauritania	UZ	Uzbekistan
GA	Gabon			VN	Viet Nam

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 96/02856

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 H04N7/173

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 95 01058 A (APPLE COMPUTER) 5 January 1995	1-8, 14-22, 28-40, 46-64 23-27
A	see page 5, line 1 - page 9, line 7 see page 25, line 1 - page 48, line 23 see page 53, line 1 - page 65, line 13 see page 68, line 1 - page 75, line 10 see figures 1-50 ---	
X	WO 94 14284 A (DISCOVERY COMMUNICATIONS INC) 23 June 1994 see page 18, line 14 - page 79, line 14 see figures 3-14 ---	1-19, 23-39, 61-64
		-/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

12 March 1997

Date of mailing of the international search report

27.03.97

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl.
Fax (+31-70) 340-3016

Authorized officer

Van der Zaal, R

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 96/02856

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>EP 0 562 295 A (THOMSON CONSUMER ELECTRONICS) 29 September 1993 see page 2, line 53 - page 3, line 19 see figure 1</p> <p>---</p>	23-27
A	<p>CABLE TV SESSIONS, MONTREUX, JUNE 10 - 15, 1993, no. SYMP. 18, 11 June 1993, POSTES; TELEPHONES ET TELEGRAPHES SUISSES, pages 555-567, XP000379380 HOARTY W L: "MULTIMEDIA ON CABLE TELEVISION SYSTEMS"</p> <p>-----</p>	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 96/02856

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9501058 A	05-01-95	US 5594509 A	14-01-97
		AU 7114394 A	17-01-95
-----	-----	-----	-----
WO 9414284 A	23-06-94	AU 5732994 A	04-07-94
		AU 5733094 A	04-07-94
		AU 5733194 A	04-07-94
		AU 5733294 A	04-07-94
		AU 5736394 A	04-07-94
		AU 5845894 A	22-06-94
		AU 5869894 A	04-07-94
		CA 2151458 A	23-06-94
		CN 1093211 A	05-10-94
		CN 1090451 A	03-08-94
		CN 1090452 A	03-08-94
		CN 1096151 A	07-12-94
		CN 1090453 A	03-08-94
		CN 1090454 A	03-08-94
		EP 0673578 A	27-09-95
		EP 0673579 A	27-09-95
		EP 0673580 A	27-09-95
		EP 0673581 A	27-09-95
		EP 0673582 A	27-09-95
		EP 0673583 A	27-09-95
		EP 0674824 A	04-10-95
		JP 8510869 T	12-11-96
		JP 8506938 T	23-07-96
		JP 8506939 T	23-07-96
		JP 8506940 T	23-07-96
		JP 8506941 T	23-07-96
		JP 8506942 T	23-07-96
		NZ 259148 A	26-11-96
		WO 9413107 A	09-06-94
		WO 9414279 A	23-06-94
		WO 9414280 A	23-06-94
		WO 9414281 A	23-06-94
		WO 9414282 A	23-06-94
		WO 9414283 A	23-06-94
		US 5559549 A	24-09-96
		US 5600364 A	04-02-97
		US 5600573 A	04-02-97

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 96/02856

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0562295 A	29-09-93	BR 9300727 A	08-09-93

PATENT COOPERATION TREATY

REC'D

02 FEB 1998

WIPO

PCT

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference J.24521 WO	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (PCT/IPEA/416)
International application No. PCT/GB96/02856	International filing date (day/month/year) 19/11/1996	Priority date (day/month/year) 22/12/1995
International Patent Classification (IPC) or national classification and IPC H04N7/173		
Applicant BRITISH SKY BROADCASTING LIMITED et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 8 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 2 sheets.

3. This report contains indications relating to the following items:

- I Basis of the report
- II Priority
- III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV Lack of unity of invention
- V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI Certain documents cited
- VII Certain defects in the international application
- VIII Certain observations on the international application

Date of submission of the demand 21/07/1997	Date of completion of this report 29.01.98
Name and mailing address of the IPEA/ European Patent Office D-80298 Munich Tel. (+49-89) 2399-0, Tx: 523656 epmu d Fax: (+49-89) 2399-4465	Authorized officer Glendinning, D Telephone No. (+49-89) 2399-2443



INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB96/02856

I. Basis of the report

1. This report has been drawn on the basis of (substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.):

Description, pages:

1-45 as originally filed

Claims. No.:

1-59,60 (part) as originally filed

60 (part),61-64 as received on 08/12/1997 with letter of 04/12/1997

Drawings, sheets:

1/50-50/50 as originally filed

- 2. The amendments have resulted in the cancellation of:**

- the description, pages:
- the claims, Nos.:
- the drawings, sheets

3. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c));

- #### 4. Additional observations, if necessary:

IV. Lack of unity of invention

- 1. In response to the invitation to restrict or pay additional fees the applicant has:**

restricted the claims.

paid additional fees.

paid additional fees under protest.

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/GB96/02856

- neither restricted nor paid additional fees.
2. This Authority found that the requirement of unity of invention is not complied and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
- complied with.
- not complied with for the following reasons:
- see separate sheet**
4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:
- all parts.
- the parts relating to claims Nos. .

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims 5,15,18-27,31,38,39,41-64
	No: Claims 1-4,6-13,14,16,17,28-30,32-37,40
Inventive step (IS)	Yes: Claims 54,61-64
	No: Claims 5,15,18-27,31,38,39,41-53,55-60
Industrial applicability (IA)	Yes: Claims 1-64
	No: Claims

2. Citations and explanations

see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB96/02856

1 Unity of invention

Interactive on-line TV systems were well-known at the priority date of the present application so that the independent claims of the application, relating to a variety of quite distinct functions of such a system, fall to be considered as relating to separate inventions in a known technical field. The inventions which appear to be claimed are as follows:

- i) a receiver and method of interacting as in claims 1-45 and 59, 60;
- ii) an interactive services interface as in claims 46-58;
- iii) a receiver as in claim 61;
- iv) a receiver as in claim 62; and
- v) a receiver as in claims 63 and 64.

The examiner commented on practically all of the claims in the first written opinion, so no great effort on his part is called for in drawing up this Report on the basis of all of the claims - this will therefore be done.

2 Lack of Novelty

2.1 Attention is drawn to the prior art documents

D1 = WO95/01058

D2 = WO94/14284

D3 = EP-A-0562295

which will be referred to hereinafter by the abbreviations indicated.

2.2 Claims 1-45 cover the home shopping function of the applicants' apparatus, a

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB96/02856

function also made available by the system of D1. D1 discloses an interactive home-shopping function within an integrated computer-controlled TV system, the transmitted signals containing video and information data which are processed by a receiver for display on a TV screen. The user controls the entire system by a remote control device (cf. claim 7) having a keypad (cf. claim 8) and a modem (cf. claims 9 and 10) is provided for linking the user's terminal with remote service providers via a telecommunication link (cf. claim 9). The ordering of goods and keying in of a PIN number (figure 49 of D1) is in effect the processing of a sub-program (cf. claim 3) within the information data and the processor responds to information from the service provider to display on screen (figure 50) an indication that the order has been received by the service provider and that the ordered goods will be delivered at some specified time ("tomorrow before 5pm in the case of figure 50). It is to be noted that whilst the home shopping function is shown as a TV channel in figure 43 of D1 "it could be presented as an on-line service through a transmitting device connected to the T/T cable 52" (see page 71, first paragraph). In addition the memory 65 of D1 stores data received over the T/T cable 52 (see page 30, first paragraph)(cf. claim 2 and 11).

In light of the above it is considered that the subject matter of claims 1-4,6-13,28-30,32-36 lacks novelty.

In their letter of 04.12.97 the applicants sought to draw a distinction between the subject matter of claims 1-45 and the disclosure of D1 by pointing out that their interactive image is created from data which is broadcast, as opposed to being transmitted on a dedicated channel of a telecommunications link. It is true that the bulk of the disclosure of D1 is concerned with a cable TV system, but attention is drawn to the first paragraph on page 25 of D1, from which it is clear that the additional information, i.e. additional to the TV program signals, could be broadcast over a satellite service system or an RF system, so the above objection as to lack of novelty appears well-founded.

- 2.3 Claims 14,16,17,37,40 concern the interactive screens presented to the user. The user of the D1 system will select the home-shopping function as shown in figure 43. The next-lower level screen, shown in figure 45, presents a choice of various companies offering goods for sale. The next lower level, figure 46, indicates the

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB96/02856

goods offered by one particular company. The next lower screen, figure 48, gives details on one particular item offered for sale by one particular company.

In light of the above the subject matter of claims 14, 16, 17, 37 and 40 is considered to lack novelty since they are all dependent on claim 1 or claim 28, held in paragraph 2.2 above to lack novelty on the basis of the disclosure of D1.

3 Lack of inventive step

3.1 Claims 5,15,31,38,39 concern the formation of templates in dependence on on-line data. D1 does not appear to say much about this, but the subject is treated at some length in D2, yet another interactive TV system. Attention is drawn to page 4 of D2, at lines 21-27 and also the passage from page 19, line 14 to page 20, line 20. These interactive TV systems all have basically the same hardware, the differences between them being in the software used and the information presented on the screen. It is to be expected that the makers of one system will be keen to modify their software so as to enable their system to perform useful functions devised by other manufacturers, and so it is wholly to be expected that the skilled person reading D1 and D2 would see the advantage of incorporating in D1 the template formation and modification facility afforded by D2.

In light of the above the subject matter of claims 5, 15, 31, 38 and 39 is considered to lack inventive step.

3.2 It is not entirely clear what subject matter the applicants seek to protect with claims 18-22 and 41-45, but it would appear that these claims concern the problem of how to present on the screen all the available information when there is too much information for it all to be viewed on the screen at the same time. However, the solutions to this problem are standard in the computer field. Virtually every text-processing programme enables the user to step the text up or down a line at a time (using the up or down arrow) or a page at a time (using the page-up and page-down keys). In addition those programmes usually have vertical and horizontal scroll bars. The subject matter of claims 18-22 and 41-45 is therefore considered to lack inventive step.

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB96/02856

- 3.3 Claims 23-27 are concerned with a receiver capable of reading two cards. These claims are all appendant to claim 1, held in paragraph 2.2 above to lack novelty over the disclosure of D1. D1 appears not to disclose a receiver capable of reading two cards. However D3 discloses a TV decoder capable of reading three cards and so it must be considered obvious to the skilled person that the system of D1 could advantageously be modified to read two or more cards from different service supplier to order and pay for services from the different suppliers. Claims 25-27 concern well-known cards widely in use, and so far as claim 24 is concerned the fact that a card is issued by a financial institution rather than any other company would seem irrelevant so far as patentability is concerned. Present claims 23-27 are therefore all considered to lack inventive step.
- 3.4 Claims 46-60 all concern a hierarchical arrangement of interactive screens for home shopping. The facilities offered by the D1 system in this respect are discussed above in paragraph 2.3. The only difference between the present system and that of D1 is that the present system offers an extra screen to cope with the situation where one supplier offers a range of goods and a screen is provided to enable the user to select one particular range, before going on to another screen to select one particular item within the selected range. This, however, is a minor difference of detail - the basic hierarchical structure is disclosed by D1, so that the subject matter of claims 46-50,52,55,57 and 58 is considered to lack inventive step.
- 3.5 Claims 51 and 53 relate to the templates discussed above in paragraph 3.1, so that the subject matter of these claims is considered to lack inventive step on the basis of a combination of D1 and D2.
- 3.6 Claim 56 concerns the case where there is too much information to be displayed on the screen at one time. This is discussed above in paragraph 2.4. On the basis of what is said there the subject matter of claim 56 is considered to lack inventive step.
- 3.7 Claims 59 and 60 are somewhat confusing in referring to "constant background image", "the background image comprising a portion having a subject that corresponds with the subject of the background of the preview picture" and "a changeable graphic overlay having a portion containing a subject that corresponds with the subject of the background and/or the preview picture", but they are clearly

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB96/02856

intended to cover the arrangement of figure 14. The examiner can see no clear disclosure of the figure 14 arrangement in the prior art documents on file, but notes that this is a common feature in text-processing programmes. In both "Word for Windows" and "WordPerfect", for example, it is possible to have special text or graphics boxes superimposed on some background text - the frame of the box can be displayed or not, at the choice of the user, and when the frame of the box is not displayed the special text or graphic appears to float, as it were, on the background text. Of course it is not necessary that there be background text - the special text and graphic can simply float on a blank screen. The figure 14 arrangement is thus no more than the application to interactive home-shopping screens of a technical feature well-known to those skilled in the art. The subject matter of claims 59 and 60 is thus considered to lack inventive step.

- 4 The examiner can see no clear disclosure or suggestion of the subject matter of claims 54 and 61-64 in the prior art documents on file.

5 Clarity

- 5.1 Claims 59 and 60 are obscure in that they employ the somewhat confusing expressions "constant background image", "the background image comprising a portion having a subject that corresponds with the subject of the background of the preview picture" and "a changeable graphic overlay having a portion containing a subject that corresponds with the subject of the bacground and/or the preview picture".

interactive image comprises a changeable graphic overlay having a portion containing a subject that corresponds with the subject of the background and/or the preview picture so that the graphic overlay and the background picture and/or the preview picture appear to form a single continuous interactive image.

61. A receiver for receiving television signals in a plurality of channels, each signal comprising video data defining a television programme and programme scheduling data defining the scheduling of programmes in the plurality of channels, the receiver being arranged to produce from received programme scheduling data output signals defining for display an image of a list of present programmes in the plurality of channels, the receiver comprising a user operable selector operable to select from the list when displayed one of the present programmes and being responsive to such selection by receiving the video data for the selected present programme and combining the video data with the output signals so that the output signals define an image of the selected present programme in combination with the image of the list of the present programmes.

62. A receiver for receiving television signals in a plurality of channels each defining a television

programme, the receiver comprising a processor adapted to generate output signals for display of an image representing a list of programmes receivable by the receiver, the receiver comprising a user operable selector operable to select from the list when displayed channels for which no information will normally be displayable by the receiver.

63. A receiver for receiving television signals in a plurality of channels each defining a television programme, the receiver comprising a processor adapted to generate output signals for display of an image representing an ordered list of channels receivable by the receiver, the receiver comprising a user operable selector operable to select the order in which channels are listed in the list.

64. A receiver as claimed in claim 63, wherein the processor is adapted to generate output signals representing a selected one of a plurality of predefined images representing programme and/or channel listings, and is arranged to respond to re-ordering of the list of receivable channels by correspondingly re-ordering programme and/or channel listings in other ones of the predefined images.

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

Date of mailing (day/month/year) 04 August 1997 (04.08.97)	To: United States Patent and Trademark Office (Box PCT) Crystal Plaza 2 Washington, DC 20231 ETATS-UNIS D'AMERIQUE in its capacity as elected Office
International application No. PCT/GB96/02856	Applicant's or agent's file reference J.24521 WO
International filing date (day/month/year) 19 November 1996 (19.11.96)	Priority date (day/month/year) 22 December 1995 (22.12.95)
Applicant TOWNSEND, Christopher, Peter et al	

1. The designated Office is hereby notified of its election made:

in the demand filed with the International Preliminary Examining Authority on:

21 July 1997 (21.07.97)

in a notice effecting later election filed with the International Bureau on:

2. The election was

was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer F. Gateau Telephone No.: (41-22) 338.83.38
---	---